

ABSTRACT

THESIS: The potential of predictive modeling of archaeological resources using high resolution multispectral GeoEye-1 Imagery at the Mann site, Posey County, Indiana

STUDENT: Bradley R. Painter

DEGREE: Master of Arts

COLLEGE: Sciences and Humanities

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I explore the viability of using geographic information systems and satellite-based remote sensing to predict locations of archaeological resources in the Midwestern United States. The study area used for this investigation is the Mann site in Posey County, Indiana (12Po2) and the primary remote sensing data used is GeoEye-1 satellite imagery obtained on October 14, 2010. The GeoEye-1 satellite offers affordable imagery that has a relatively high spatial resolution. The resolution of this imagery is high enough to detect variations in the spatial and spectral signatures of these resources to allow for predictive modeling of their locations. Anomalies have been detected at the site and in the adjacent landscape that could be undiscovered archaeological resources.